The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of manufacturing a semiconductor device comprising the steps of:

forming a semiconductor film comprising silicon over a substrate;

irradiating said semiconductor film with laser light in air for crystallizing said semiconductor film;

removing a natural oxidation film formed on a surface of the crystallized semiconductor film by etching after the irradiation of the laser light; and

leveling the surface of the crystallized semiconductor film by recrystallizing the crystallized semiconductor film after removing said natural oxidation film.

2. (Currently Amended) A method of manufacturing a semiconductor device comprising the steps of:

forming a semiconductor film comprising silicon over a substrate;

irradiating said semiconductor film with laser light in air for crystallizing said semiconductor film;

removing an oxide film formed on a surface of the crystallized semiconductor film by etching after the irradiation of the laser light; and

leveling the surface of the crystallized semiconductor film by recrystallizing the crystallized semiconductor film in a reducing atmosphere after removing said oxide film.

3. (Currently Amended) A method of manufacturing a semiconductor device comprising the steps of:

forming a semiconductor film comprising silicon over a substrate;

irradiating said semiconductor film with laser light in air for crystallizing said semiconductor film;

removing an oxide film formed on a surface of the crystallized semiconductor film by etching after the irradiation of the laser light; and

leveling the surface of the crystallized semiconductor film by recrystallizing the crystallized semiconductor film in an inert gas after removing said oxide film.

4. (Currently Amended) A method of manufacturing a semiconductor device comprising the steps of:

forming a semiconductor film comprising silicon over a substrate;

irradiating said semiconductor film with laser light in air for crystallizing said semiconductor film;

removing an oxide film formed on a surface of the crystallized semiconductor film by etching after the irradiation of the laser light; and

leveling the surface of the crystallized semiconductor film by recrystallizing the crystallized semiconductor film in an atmosphere after removing said oxide film,

wherein a concentration of oxygen or an oxygen compound contained in said atmosphere is 10 ppm or less.

5. (Currently Amended) A method of manufacturing a semiconductor device comprising the steps of:

forming a semiconductor film comprising silicon over a substrate;

irradiating said semiconductor film with laser light in air for crystallizing said semiconductor film;

removing an oxide film formed on a surface of the crystallized semiconductor film by etching after the irradiation of the laser light; and

leveling the surface of the crystallized semiconductor film by recrystallizing the crystallized semiconductor film in a reducing atmosphere after removing said oxide film,

wherein a concentration of oxygen or an oxygen compound contained in said reducing atmosphere is 10 ppm or less.

6. (Currently Amended) A method of manufacturing a semiconductor device comprising the steps of:

forming a semiconductor film comprising silicon over a substrate;

irradiating said semiconductor film with laser light in air for crystallizing said semiconductor film;

removing an oxide film formed on a surface of the crystallized semiconductor film by etching after the irradiation of the laser light; and

leveling the surface of the crystallized semiconductor film by recrystallizing the crystallized semiconductor film in an inert gas after removing said oxide film,

wherein a concentration of oxygen or an oxygen compound contained in said inert gas is 10 ppm or less.

7. (Currently Amended) A method of manufacturing a semiconductor device comprising the steps of:

forming a semiconductor film comprising silicon over a substrate;

irradiating said semiconductor film with laser light in air for crystallizing said semiconductor film;

treating a surface of the semiconductor film with a hydrofluoric acid to remove a natural oxidation film formed on the surface of the crystallized semiconductor film after the irradiation of the laser light; and

leveling the surface of the crystallized semiconductor film by recrystallizing the crystallized semiconductor film after the treatment with said hydrofluoric acid.

8. (Currently Amended) A method of manufacturing a semiconductor device comprising the steps of:

forming a semiconductor film comprising silicon over a substrate;

irradiating said semiconductor film with laser light in air for crystallizing said semiconductor film;

treating a surface of the crystallized semiconductor film with a hydrofluoric acid after the irradiation of the laser light; and

leveling the surface of the crystallized semiconductor film by recrystallizing the crystallized semiconductor film after the treatment with said hydrofluoric acid in a reducing atmosphere.

9. (Currently Amended) A method of manufacturing a semiconductor device comprising the steps of:

forming a semiconductor film comprising silicon over a substrate;

irradiating said semiconductor film with laser light in air for crystallizing said semiconductor film;

treating a surface of the crystallized semiconductor film with a hydrofluoric acid after the irradiation of the laser light; and

leveling the surface of the crystallized semiconductor film by recrystallizing the crystallized semiconductor film after the treatment with said hydrofluoric acid in an inert gas.

10. (Currently Amended) A method of manufacturing a semiconductor device comprising the steps of:

forming a semiconductor film comprising silicon over a substrate;

irradiating said semiconductor film with laser light in air for crystallizing said semiconductor film;

treating a surface of the crystallized semiconductor film with a hydrofluoric acid after the irradiation of the laser light; and

leveling the surface of the crystallized semiconductor film by recrystallizing the crystallized semiconductor film after the treatment with said hydrofluoric acid in an atmosphere,

wherein a concentration of oxygen or an oxygen compound contained in said atmosphere is 10 ppm or less.

11. (Currently Amended) A method of manufacturing a semiconductor device comprising the steps of:

forming a semiconductor film comprising silicon over a substrate;

irradiating said semiconductor film with laser light in air for crystallizing said semiconductor film;

treating a surface of the crystallized semiconductor film with a hydrofluoric acid after the irradiation of the laser light; and

leveling the surface of the crystallized semiconductor film by recrystallizing the crystallized semiconductor film after the treatment with said hydrofluoric acid in a reducing atmosphere,

wherein a concentration of oxygen or an oxygen compound contained in said reducing atmosphere is 10 ppm or less.

12. (Currently Amended) A method of manufacturing a semiconductor device comprising the steps of:

forming a semiconductor film comprising silicon over a substrate;

irradiating said semiconductor film with laser light in air for crystallizing said semiconductor film;

treating a surface of the crystallized semiconductor film with a hydrofluoric acid after the irradiation of the laser light; and

leveling the surface of the crystallized semiconductor film by recrystallizing the crystallized semiconductor film after the treatment with said hydrofluoric acid in an inert gas,

wherein a concentration of oxygen or an oxygen compound contained in said inert gas is 10 ppm or less.

13. (Currently Amended) A method of manufacturing a semiconductor device according to any one of claims 1-12, wherein the step of leveling the surface of said crystallized semiconductor film is conducted by furnace annealing.

14. (Currently Amended) A method of manufacturing a semiconductor device according to any one of claims 1-12, wherein the step of leveling the surface of said crystallized semiconductor film is conducted between 900 and 1200 °C.

15. (Original) A method of manufacturing a semiconductor device according to any one of claims 3, 6, 9, and 12, wherein said inert gas is nitrogen.

16. (Original) A method of manufacturing a semiconductor device according to any one of claims 2, 5, 8, and 11, wherein said reducing atmosphere comprises hydrogen.

17. (Original) A method of manufacturing a semiconductor device according to any one of claims 1-12, further comprising a step of treating a surface of the semiconductor film with a buffered hydrofluoric acid before the irradiation of the laser light.

18. (Canceled)

19. (Currently Amended) A method of manufacturing a semiconductor device comprising the steps of:

forming a semiconductor film comprising silicon over a substrate;

irradiating said semiconductor film with laser light in an atmosphere containing oxygen for crystallizing said semiconductor film;

removing an oxide film formed on a surface of the crystallized semiconductor film by etching after the irradiation of the laser light; and

leveling the surface of the crystallized semiconductor film by recrystallizing the crystallized semiconductor film in an atmosphere after removing said oxide film,

wherein a concentration of oxygen or an oxygen compound contained in said atmosphere is 10 ppm or less.

20. (Currently Amended) A method of manufacturing a semiconductor device comprising the steps of:

forming a semiconductor film comprising silicon over a substrate;

irradiating said semiconductor film with laser light in an atmosphere containing oxygen for crystallizing said semiconductor film;

treating a surface of the crystallized semiconductor film with a hydrofluoric acid after the irradiation of the laser light; and

leveling the surface of the crystallized semiconductor film by recrystallizing the crystallized semiconductor film after the treatment with said hydrofluoric acid in an atmosphere,

wherein a concentration of oxygen or an oxygen compound contained in said atmosphere is 10 ppm or less.

21. (Currently Amended) A method of manufacturing a semiconductor device according to claim 19, wherein the step of leveling the surface of said crystallized semiconductor film is conducted by furnace annealing.

22. (Currently Amended) A method of manufacturing a semiconductor device according to claim 20, wherein the step of leveling the surface of said crystallized semiconductor film is conducted by furnace annealing.

23. (Currently Amended) A method of manufacturing a semiconductor device according to claim 19, wherein the step of leveling the surface of said crystallized semiconductor film is conducted between 900 and 1200 °C.

24. (Currently Amended) A method of manufacturing a semiconductor device according to claim 20, wherein the step of leveling the surface of said crystallized semiconductor film is conducted between 900 and 1200 °C.

25. (Previously Presented) A method of manufacturing a semiconductor device according to claim 19, wherein said atmosphere in said leveling step contains an inert gas.

26. (Previously Presented) A method of manufacturing a semiconductor device according to claim 20, wherein said atmosphere in said leveling step contains an inert gas.

27. (Previously Presented) A method of manufacturing a semiconductor device according to claim 19, wherein said atmosphere in said leveling step contains a reducing atmosphere.

28. (Previously Presented) A method of manufacturing a semiconductor device according to claim 20, wherein said atmosphere in said leveling step contains a reducing atmosphere.

29. (Previously Presented) A method of manufacturing a semiconductor device according to claim 19, further comprising a step of treating a surface of the semiconductor film with a buffered hydrofluoric acid before the irradiation of the laser light.

30. (Previously Presented) A method of manufacturing a semiconductor device according to claim 20, further comprising a step of treating a surface of the semiconductor film with a buffered hydrofluoric acid before the irradiation of the laser light.

31.-46. (Canceled)

47. (Currently Amended) A method of manufacturing a semiconductor device comprising the steps of:

forming a semiconductor film comprising silicon over a substrate;

irradiating said semiconductor film with laser light in an atmosphere containing oxygen for crystallizing said semiconductor film;

removing a natural oxidation film formed on a surface of the crystallized semiconductor film by etching after the irradiation of the laser light; and

leveling the surface of the crystallized semiconductor film by recrystallizing the crystallized semiconductor film after removing said natural oxidation film.

48. (Currently Amended) A method of manufacturing a semiconductor device comprising the steps of:

forming a semiconductor film comprising silicon over a substrate;

irradiating said semiconductor film with laser light in an atmosphere containing oxygen for crystallizing said semiconductor film;

treating a surface of the crystallized semiconductor film with a hydrofluoric acid to remove a natural oxidation film formed on the surface of the crystallized semiconductor film after the irradiation of the laser light; and

leveling the surface of the crystallized semiconductor film by recrystallizing the crystallized semiconductor film after the treatment with said hydrofluoric acid.

49. (Currently Amended) A method of manufacturing a semiconductor device according to claim 47, wherein the step of leveling the surface of said crystallized semiconductor film is conducted by furnace annealing.

50. (Currently Amended) A method of manufacturing a semiconductor device according to claim 48, wherein the step of leveling the surface of said crystallized semiconductor film is conducted by furnace annealing.

51. (Currently Amended) A method of manufacturing a semiconductor device according to claim 47, wherein the step of leveling the surface of said crystallized semiconductor film is conducted between 900 and 1200 °C.

52. (Currently Amended) A method of manufacturing a semiconductor device according to claim 48, wherein the step of leveling the surface of said crystallized semiconductor film is conducted between 900 and 1200 °C.

53. (Previously Presented) A method of manufacturing a semiconductor device according to claim 47, wherein an atmosphere in said leveling step contains an inert gas.

54. (Previously Presented) A method of manufacturing a semiconductor device according to claim 48, wherein an atmosphere in said leveling step contains an inert gas.

55. (Previously Presented) A method of manufacturing a semiconductor device according to claim 47, wherein an atmosphere in said leveling step contains a reducing atmosphere.

56. (Previously Presented) A method of manufacturing a semiconductor device according to claim 48, wherein an atmosphere in said leveling step contains a reducing atmosphere.

57. (Previously Presented) A method of manufacturing a semiconductor device according to claim 47, further comprising a step of treating a surface of the semiconductor film with a buffered hydrofluoric acid before the irradiation of the laser light.

58. (Previously Presented) A method of manufacturing a semiconductor device according to claim 48, further comprising a step of treating a surface of the semiconductor film with a buffered hydrofluoric acid before the irradiation of the laser light.

59. (New) A method of manufacturing a semiconductor device comprising the steps of:

forming a semiconductor film comprising silicon over a substrate;

irradiating the semiconductor film with laser light in air for crystallizing the semiconductor film;

removing a natural oxidation film formed on a surface of the crystallized semiconductor film by etching after the irradiation of the laser light;

leveling the surface of the crystallized semiconductor film by recrystallizing the crystallized semiconductor film after removing said natural oxidation film;

forming a gate insulating film over the crystallized semiconductor film after the leveling step; and

forming an impurity region in the crystallized semiconductor film after forming the gate insulating film.

60. (New) A method of manufacturing a semiconductor device according to claim 59, wherein the step of leveling the surface of the crystallized semiconductor film is conducted by furnace annealing.

61. (New) A method of manufacturing a semiconductor device according to claim 59, wherein the step of leveling the surface of said crystallized semiconductor film is conducted between 900 and 1200 °C.

62. (New) A method of manufacturing a semiconductor device according to claim 59, wherein an atmosphere in the leveling step contains an inert gas.

63. (New) A method of manufacturing a semiconductor device according to claim 59, wherein an atmosphere in the leveling step contains a reducing atmosphere.

64. (New) A method of manufacturing a semiconductor device according to claim 59, further comprising a step of treating a surface of the semiconductor film with a buffered hydrofluoric acid before the irradiation of the laser light.